A. CLASSIFICATION OF SUBJECT MATTER IPC 7 C12N5/06 C12N5/08

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, PAJ, WPI Data, BIOSIS, EMBASE

0-1	C. DOCUMENTS CONSIDERED TO BE RELEVANT						
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.					
E	WO 2004/007701 A (KREMER BERND KARL FRIEDRICH; FAENDRICH FRED (DE); RUHNKE MAREN (DE);) 22 January 2004 (2004-01-22) cited in the application the whole document	1-20, 29-33					
X	RONCAROLO M-G ET AL: "The role of different subsets of T regulatory cells in controlling autoimmunity" CURRENT OPINION IN IMMUNOLOGY, CURRENT BIOLOGY LTD, XX, vol. 12, no. 6, 1 December 2000 (2000-12-01), pages 676-683, XP004257742 ISSN: 0952-7915 page 679, column 1, paragraph 2 - column 2, paragraph 1 page 681, column 1, paragraph 2	32					

X Further documents are listed in the continuation of box C.	Patent family members are listed in annex.
Special categories of cited documents:  A' document defining the general state of the art which is not considered to be of particular relevance  E' earlier document but published on or after the International filing date  L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)  O' document referring to an oral disclosure, use, exhibition or other means  P' document published prior to the international filing date but later than the priority date claimed	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention.  "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone.  "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art.  "&" document member of the same patent family
Date of the actual completion of the international search  17 August 2004	Date of mailing of the international search report  30/08/2004
Name and mailing address of the ISA  European Patent Office, P.B. 5818 Patentlaan 2  NL – 2280 HV Rijswijk  Tel. (+31–70) 340–2040, Tx. 31 651 epo ni,  Fax: (+31–70) 340–3016	Authorized officer





International Application No
PCT/EP2004/000109

	PCT/EP2004/000109					
C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT  Category Citation of document, with indication, where appropriate, of the relevant passages    Belevant to claim No.						
Citation of document, with Indication, where appropriate, of the relevant passages	Relevant to claim No.					
WO 02/097070 A (FOND TELETHON; LEVINGS MEGAN (IT); RONCAROLO MARIA GRAZIA (IT); SAN R) 5 December 2002 (2002-12-05) abstract page 1, line 1 - line 11 page 7, line 5 - line 16	32					
MUNN DAVID H ET AL: "Selective activation-induced apoptosis of peripheral T cells imposed by macrophages: A potential mechanism of antigen-specific peripheral lymphocyte deletion" JOURNAL OF IMMUNOLOGY, vol. 156, no. 2, 1996, pages 523-532, XP002287396 ISSN: 0022-1767 abstract						
LOPEZ M ET AL: "Infusion of large quantities of autologous blood monocyte-derived macrophages in two cancer patients did not induce increased concentration of IL-6, TNF-alpha, soluble CD14 and nitrate in blood plasma" EUROPEAN CYTOKINE NETWORK, vol. 5, no. 4, 1994, pages 411-414, XP008032591 ISSN: 1148-5493 abstract page 411, column 1, line 14 - line 22						
RUTELLA SERGIO ET AL: "Role for granulocyte colony-stimulating factor in the generation of human T regulatory type 1 cells" BLOOD, vol. 100, no. 7, 1 October 2002 (2002-10-01), pages 2562-2571, XP002287397 ISSN: 0006-4971 abstract						
WO 03/083092 A (KREMER BERND KARL FRIEDRICH; FAENDRICH FRED (DE); RUHNKE MAREN (DE);) 9 October 2003 (2003-10-09) abstract page 6, paragraph 2 - paragraph 3						
	Citation of document, with indication, where appropriate, of the relevant passages  WO 02/097070 A (FOND TELETHON; LEVINGS MEGAN (IT); RONCAROLO MARIA GRAZIA (IT); SAN R) 5 December 2002 (2002-12-05) abstract page 1, line 1 - line 11 page 7, line 5 - line 16  MUNN DAVID H ET AL: "Selective activation-induced apoptosis of peripheral T cells imposed by macrophages: A potential mechanism of antigen-specific peripheral lymphocyte deletion" JOURNAL OF IMMUNOLOGY, vol. 156, no. 2, 1996, pages 523-532, XP002287396 ISSN: 0022-1767 abstract  LOPEZ M ET AL: "Infusion of large quantities of autologous blood monocyte-derived macrophages in two cancer patients did not induce increased concentration of IL-6, TNF-alpha, soluble CD14 and nitrate in blood plasma" EUROPEAN CYTOKINE NETWORK, vol. 5, no. 4, 1994, pages 411-414, XP008032591 ISSN: 1148-5493 abstract page 411, column 1, line 14 - line 22  RUTELLA SERGIO ET AL: "Role for granulocyte colony-stimulating factor in the generation of human T regulatory type 1 cells" BLOOD, vol. 100, no. 7, 1 October 2002 (2002-10-01), pages 2562-2571, XP002287397 ISSN: 0006-4971 abstract  WO 03/083092 A (KREMER BERND KARL FRIEDRICH; FAENDRICH FRED (DE); RUHNKE MAREN (DE);) 9 October 2003 (2003-10-09) abstract					

## **INTERNATIONAL SEARCH REPORT**

International application No. PCT/EP2004/000109

Box II Observations where certain claims were found unsearchable (Continuation of Item 2 of first sheet)
This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:
1. X Claims Nos.: because they relate to subject matter not required to be searched by this Authority, namely:
Although claims 1-12 (see step a) or claim 1) and 34-39 are directed to a method of treatment of the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
Claims Nos.:     because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. Claims Nos.: because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).
Box III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)
This International Searching Authority found multiple inventions in this international application, as follows:
As all required additional search fees were timely paid by the applicant, this international Search Report covers all searchable claims.
2. As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. No required additional search fees were timely paid by the applicant. Consequently, this international Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
Remark on Protest  The additional search fees were accompanied by the applicant's protest.  No protest accompanied the payment of additional search fees.

## INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
PCT/EP2004/000109

	Patent document clted in search report		Publication date	Patent family member(s)			Publication date
WO	2004007701	Α	22-01-2004	DE WO	10231655 2004007701		26-02-2004 22-01-2004
WO	02097070	Α	05-12-2002	WO EP	02097070 1409650		05-12-2002 21 <b>-</b> 04-2004
WO	03083092	A	09-10-2003	DE WO WO EP US US	10214095 03083091 03083092 1436381 2004101962 2004009595	A1 A1 A1 A1	25-09-2003 09-10-2003 09-10-2003 14-07-2004 27-05-2004 15-01-2004